ERP

An Approach to Enterprise Integration in the Department of Defense

ODUSD (Logistics & Materiel Readiness) Logistics Systems Management (LSM) 10 September 2001

Why Enterprise Integration (EI)?

- DoD goals mandate Enterprise approach
 - War Fighter needs the ability to:
 - assess and adjust alternative courses of action
 - obtain a network (global) response
 - DoD Leadership should be able to:
 - conduct cost-based resource management
 - maintain resource accountability in a single picture
- COTS applications are preferred approach
 - Accelerates incorporating commercial business practices
 - Reduces the cost, time and risk of process change
- LSM premise: DoD <u>is</u> the Enterprise

Enterprise Resource Planning (ERP) Is the Predominant Commercial Enterprise Integration Solution

What is ERP?

- ERP software is a family of computer programs that can *instantly access and update* information shared *among business functions* typically including manufacturing, logistics, procurement, finance, and human resources.
- A customer order *entered once* triggers orchestrated actions among all of the resources required to fulfill the order. By linking business functions, *entire processes are automated*.
- The earmarks of a true ERP system are *a common (or virtually common) database* and programs, or modules that are *integrated* and therefore can easily talk to each other and share data in real time across multiple business functions.
- ERP systems best *support activity based costing*, providing integrated performance information for operational improvement, strategic learning and *accurate measurement* of production efficiency and customer fulfillment.

ERP Is Not a Panacea

EI Approaches

- Local "Best of Breed"
- Global "Best of Breed"
- Local ERP
- Global ERP

Incremental/ Cyclic Feedback and Development

Analysis Shows Global ERP Have the Best Chance of Success But,

DoD Size, Complexity and Uniqueness Requires Virtual Global ERP to Enable Global Information Management and Aggregation

Logistics related enterprise integration efforts

• DLA

- Business Systems Modernization (SAP)
 - Replaces SAMMS & DISMS
 - Supply(less Energy)
- Fuels Automated System (Oracle)
 - End-to-end management

Navy

- 4 ERP pilots- program focus: (all SAP)
 - NAVAIR- Program Management
 - NAVSUP/NAVAIR- aviation supply/maintenance,
 - NAVSEA- ship regional maintenance,
 - SPAWAR- working capital fund
- Inventory Management (Lawson)
- NAVAIR MRP II (Depots) (Western Data)

Logistics related enterprise integration efforts (continued)

•Army

- Army Wholesale Logistics Modernization (SAP)
 - Replaces CCSS & SDS
 - WLMP is being procured as a service
- Rock Island Arsenal MRP II (CINCOM)

•TRANSCOM

• Military Sealift Command (Oracle Financials)

Air Force

• Planning to employ enterprise application integration

ERP / EI Success Factors

- Senior Management paves the way
- ERP / EI is a business issue...not an IT issue
- Trade "best of breed" for commonality
- Employee retraining / retention critical
- Maximize COTS use / Minimize COTS changes
- Deliver a series of small successes

Success is about change management

Why Leadership Needed

- Logistics IT is big business.
- ERP/EI implementations will be biggest and most complex IT undertaking in DoD history.
- ERP/EI implementation has been difficult in large commercial organizations, but success has come through solid leadership.
- ERP/COTS applications must drive process change...else "paved cow paths"... but DoD emphasizes its uniqueness and has tradition of IT "not invented here."
- Existing functional and DoD Component structures drive stove-pipe system solutions, impeding collaboration and DoD-wide focus.
- Change is contentious and painful.

Leadership Must

- ✓ Create a global view
- ✓ Share knowledge
- ✓ Seize collaborative efficiencies
- ✓ Oversee risk management

- ✓ Provide executive sponsorship
- ✓ Not stop Component initiative
- ✓ Not takeover
- ✓ Not create a virtual "big bang"

Collaboration by all increases each one's chance of success

What We Are Doing

- Taking a global view
 - Issuing policy
 - Promoting a consortium
 - Initiating oversight
- Commonly addressing crossfunctional interface

- Capturing and sharing lessons learned
- Leveraging vendors/integrators
- Obtaining Joint Staff involvement
- Identifying Inter-Component process opportunities

Just Beginning

Draft EI Tenets

- Champion process changes at highest levels of Component, Function and DoD enterprise.
- Collaboration and Interface
 - Use community services to share vendor-neutral data mappings, interfaces and management metrics and to minimize point-to-point communication.
 - Employ an EI Consortium to provide a single face from the Logistics community to the enterprise in defining future data and process interchanges.
 - Optimally collaborate when adding functions to commercial or federal software applications
 - Minimize turning off functions in integrated packages solely to accommodate a stovepipe system or organization.

• Change Management

- Select EI solutions consistent with Clinger-Cohen Act requirements. Perform core analysis & business area benchmarking before package selection but perform detailed business design in context of selected package embedded processes.
- Adopt the business process embedded in the commercial package; tailor only for combat advantage or other compelling requirement
- Only vendors make DoD-driven changes to their source code, pursuant to DoD enterprise brokered deals.
- Senior Component mission leaders must approve the means by which functionality is added to, or changed from, commercial or federal applications and need visibility of the changes and challenges of moving from current processes to the to-be process.

Conclusion

- DoD is the Enterprise
- Enterprise integration necessary
- High, but manageable, degree of risk with EI and ERP
- Leadership and collaboration required
- Components moving in the right direction
- We have the opportunity to lead ... not recover